

# Chinese wax mine

By Howard R. Ritzma

The Chinese Wax mine in Daniels Canyon, Wasatch County, is a small deposit of black, viscous, waxy oil emplaced in fractured, brecciated Oquirrh Formation (Pennsylvanian-Permian) on the Strawberry Valley (or Charleston) thrust sheet where the thrust has over-ridden the west margin of the Uinta Basin. The oil has apparently migrated up a fracture zone from the Wasatch or lower Green River Formations (early Eocene) beneath the thrust. The fracturing is related to a regional lineament which crosses much of northern Utah.

The deposit which has been mined sporadically for 60 or more years is the only one in Utah with a record of exploitation solely as a source of petroleum products.

The Chinese Wax mine or the Daniels Canyon oil-impregnated rock deposit as it is officially named is located in Wasatch County, 200 to 300 feet east of U.S. Highway 40 about 1.0 mile north of Daniels Summit and about 0.1 mile south of the entrance to the U.S. Forest Service Lodgepole Campground.

A short, primitive road leading east from U.S. Highway 40 along the north side of a minor, unnamed tributary of Daniels Canyon (or Daniels Creek) provides access within 50 feet to the remains of the foundation of a retort and the lower workings of the mine. The area is mountainous and thickly vegetated. Elevation is about 7,900 feet.

## History

The Chinese Wax mine was

principal investor was Joe Grover, a Park City resident of Chinese descent. Stock certificates issued in 1930 show Grover as president and Glascke as secretary of the firm. The name—Chinese Wax mine—is derived from Grover's direction of the operation. The retort erected at the mine came from an oil shale plant at Carlin, Nev. The retorted oil was a black waxy substance which was further distilled or refined at the site. One end product was a high grade, light yellow oil which was used in automobiles and machinery in the Heber City area. Some lamp oil and candle wax was also produced and used in Heber City and Park City. The market for these products was very limited. The mine and plant closed after about two years of small-scale operations. The retort used at the Chinese Wax mine was dismantled, reportedly during World War II, and moved to the vicinity of DeBeque in western Colorado's oil shale region.

Despite its minor size and the small and probably noncommercial nature of the mining and retorting operation, the Daniels Canyon oil-impregnated rock deposit is the only such deposit in Utah to be exploited solely as a source of petroleum products. This contrasts to the sizeable tonnage of material mined from other deposits and used for paving material.

## Geologic setting

The Chinese Wax mine is located on the west margin of the Uinta Basin where the basin has been over-ridden by the Strawberry Valley (or Charleston) thrust.

The Daniels Canyon deposit is

recognized by this writer in 1969 and traced in considerable detail in 1970 and 1971. In 1971 an inquiry to the Utah Geological Survey led to the rediscovery of the Chinese Wax mine and the designation of it as a previously unrecognized oil-impregnated rock deposit. When the deposit was located definitely and this location plotted on a tectonic map, it was found to lie squarely astride the lineament. Two other oil-impregnated rock deposits, Lake Fork and Spring Branch, are also on or adjacent to the feature; and two more, Tabiona and Whiterocks, are on branches of the lineament or closely parallel lineations. In October 1971 this writer presented his retiring presidential address to the Utah Geological Association entitled, "A Utah Lineament: Petroleum, Mineralization and Other Ramifications," in which the feature was named the Towanta Lineament and its relationship to the Daniels Canyon deposit discussed. In June 1974 an expanded version of this paper, entitled "Towanta Lineament, Northern Utah," was presented to the First International Conference on the New Basement Tectonics held in Salt Lake City. This paper is scheduled for publication by the Utah Geological Association in volume covering the conference proceedings.

The location of these oil-impregnated rock deposits on or adjacent to the Towanta Lineament and on branches or parallel lineations can scarcely be coincidental. It appears that faulting and fracturing along the lineament has provided a conduit for migration of oil from organic source beds known to exist at depth in the Uinta Basin.

Take heating pad  
" Lamp  
" Paul to brick oven  
Copy Ward.  
8 withness page

Plates: Paces

Thanksgiving stuff:

Spaulhouse:

Aulken  
Smith  
Candy - Switzerland